



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,806	12/28/2001	Alistair Goudie	WIRO:014US/JJB	6956

25094 7590 05/21/2004

GRAY, CARY, WARE & FREIDENRICH LLP
1221 SOUTH MOPAC EXPRESSWAY
SUITE 400
AUSTIN, TX 78746-6875

EXAMINER

FERNANDES, CHERYL M

ART UNIT	PAPER NUMBER
----------	--------------

2171

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/032,806

Applicant(s)

GOUDIE ET AL.

Examiner

Cheryl M Fernandes

Art Unit

2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 2-4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the head and tail of the queues, the latest read pointer, committed read pointer, second latest read pointer, latest write pointer, and committed write pointer must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 2-4 are objected to because of the following informalities:

Claim 2: The semicolon in line 14 should be replaced with a comma that links the remaining part of the claim (lines 15-16). Appropriate correction is required.

Claims 3 and 4 are also hereby objected to due to their dependency from claim

2.

Art Unit: 2171

4. Claim 4 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. Examiner suggests that claim 4 read "A method according to either of claims 1 or 2..". See MPEP § 608.01(n).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 5, the limitation "the received data" is recited in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by US

Patent Number 5,016,221 issued to Hamstra.

7. Referring to claim 1, Hamstra discloses:

A method of managing data stored in a queue in memory (FIFO memory configuration, see Abstract¹), the method comprising:

- reading data from a head of the queue² ('committed binary information' is read, Figure 3E element 50 in col. 8, lines 47-49);
- updating the location of a latest read pointer ('read pointer', see Figure 3E, element 30) to a location corresponding to the end of the data (col. 8, line 47 to col. 9, line 12 (Figure 3E));
- transferring the data to a destination ('shared data medium', 'optical fiber ring LAN', see Figure 4, element 22; col. 9, lines 39-52; col. 10, lines 8-31); and,
- upon receiving confirmation that the data transfer was successful (col. 10, line 8 to col. 11, line 27), updating the location of a committed read pointer ('commit pointer', Figure 3G, element 32) to a location corresponding to the end of the data (col. 12, lines 8-20).

8. Referring to claim 2, Hamstra discloses that upon receiving no confirmation or a negative confirmation that the data transfer was successful (col. 9, lines 20-23), the location of the latest read pointer is updated to assume the location of the committed read pointer (col. 9, lines 20-38).

9. Referring to claim 3, Hamstra discloses storing the latest read pointer location and the committed read pointer location, and using the latest read pointer and the committed read pointer to manage data subsequently read ('registers' store memory

¹ Examiner asserts that since Hamstra discloses a FIFO memory configuration, he is referring to a method of managing a queue in memory.

² Examiner asserts that reading data from a FIFO queue is done from the head of the queue.

Art Unit: 2171

address values of the pointers, col. 6, lines 8-39) from a second queue (col. 6, lines 59-65).

10. Referring to claim 4, Hamstra discloses reading second data from the head of the queue, updating the location of a second latest read pointer to a location corresponding to the end of the second data, and transferring the second data to the destination. Refer to the first 3 limitations of claim 1 addressed above with regard to the above mentioned limitations of claim 4 (see col. 6, line 59- col. 7, line 8 for the presence of the second data).

11. Referring to claim 4, Hamstra also discloses upon receiving confirmation that the transfer of the second data was successful (col. 10, line 8 to col. 11, line 27; col. 12, lines 3-7), removing the second latest read pointer from the location corresponding to the end of the second data (col. 12, lines 8-20).

12. Referring to claim 5, Hamstra discloses:

- writing data to a tail of the queue³ ('stored binary information', Figures 3B and 3C, element 50 in col. 7, lines 17-43);
- updating the location of a latest write pointer ('W-pointer', see Figures 3B and 3C pertaining to element 34) to a location corresponding to the end of the data (col. 7, lines 40-43); and,
- upon receiving confirmation that the received data is correct, updating the location of a committed write pointer ('commit pointer', Figures 3C and 3D,

³ Examiner asserts that writing data to a FIFO queue is done from the tail of the queue.

Art Unit: 2171

element 32) to a location corresponding to the end of the data (col. 11, line 59 to col. 12, line 7).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents or publications are cited to further show the state of the art with respect to receiving and transmitting data in stored queues using pointers such as read and write pointers.

US Patent Number 5,708,799 issued to Graziano et al (Abstract; col. 1, lines 63-65; col. 2, lines 10-13 and lines 26-31; col. 13, lines 36-39; col. 15 line 48 to col. 16 line 4).

US Patent Number 5,696,910 issued to Pawlowski (Abstract; col. 1, line 57 to col. 2, line 12; col. 10, line 58 to col. 11, line 34; col. 12, lines 9-19).


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl M Fernandes whose telephone number is (703) 305-3917. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (703) 308-1436. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2171

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CMF
May 13, 2004


SAFET METJANIĆ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100